

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,167	07/28/2003	Samuel H. Christic IV	7000-263	5590
	7590 07/06/200 TERRANOVA, P.L.L.	EXAMINER		
100 REGENCY FOREST DRIVE			PHAM, BRENDA H	
SUITE 160 CARY, NC 275	518		ART UNIT	PAPER NUMBER
			2616	
	· · ·			
		•	MAIL DATE	DELIVERY MODE
	•		07/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

J	Application No.	Applicant(s)			
Office Action Summers	10/628,167	CHRISTIE, SAMUEL H.			
Office Action Summary	Examiner	Art Unit			
	Brenda Pham	2616			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 26 Ju	ıly 2003.				
	action is non-final.				
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 1-38 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-3,5-13,15-23,25-32 and 34-38</u> is/are rejected.					
7) Claim(s) <u>4,14,24 and 33</u> is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
	_				
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on <u>26 July 2003</u> is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119	·				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
See the attached detailed Office action for a list of the certified copies not received.					
·					
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Informal P				
Paper No(s)/Mail Date <u>02/22/05</u> . 6) Other:					

Application/Control Number: 10/628,167 Page 2

Art Unit: 2616

DETAILED ACTION

1. Claims 1-38 are currently pending in the application.

Claim Objections

2. Claims 2, 5, 12, 15, 22, 25, 31 and 34 are objected to because of the following informalities:

Claim 2, step "a)", "b)" should be corrected to "e)" and "f)".

Claim 5, step "a)", "b)", "c)" and "d)", should be corrected to "e)", "f)", "g)", "h)".

Claim 12, step "a)" and "b)" should be corrected to "v)" and "vi)".

Claim 15, step "a)", "b)", "c)" and "d)" should be corrected to "v)", vi)", "vii)" and "viii)".

Claim 22, step "a)" and "b)" should be corrected to "e)" and "f)".

Claim 25, step "a)", "b)", "c)" should be corrected to "e)", "f)", "g)".

Claim 31, step "a)", "b)", should be corrected to "c)" and "d)".

Claim 34, step "a)", "b)", "c)", should be corrected to "d)", "e)", "f)".

Claim 11, line 3 and 6, respectively, "adapted to" should be deleted from the claim.

Claim 12, line 19-20, "adapted to" should be deleted from the claim.

Claim 15, line 4, "adapted to" should be deleted from the claim.

Claim 16, line 17-18, "adapted to" should be deleted from the claim.

Claim 17, line 23-24, "adapted to" should be deleted from the claim.

Claim 18, line 27, "adapted to" should be deleted from the claim.

Application/Control Number: 10/628,167

Art Unit: 2616

Claim 30, line 31 and 34, respectively, "adapted to" should be deleted from the claim.

Claim 31, line 13, "adapted to" should be deleted from the claim.

Claim 34, line 31, "adapted to" should be deleted from the claim.

Claim 35, line 9, "adapted to" should be deleted from the claim.

Claim 36, line 15, "adapted to" should be deleted from the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8 and 18 are rejected under 35 U.S.C. 112, second paragraph as being lacks of antecedent basis in the claim.

Claims 8, 18 recite the limitation "wherein a public IP address". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2616

6. Claims 1, 9-11, 19-21, 28-30 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Watanabe et al** (US 7,072,657 B2) in view of **Datta et al** (2002/0087724 A1).

Regarding claims 1, 11, 21 and 30, **Watanabe et al** disclose system and method for facilitating packet communications from a terminal to a network proxy comprising (referring to figure 5):

establishing a plurality of communication sessions (506, 514, 520) via a plurality of access networks (502, 510, 516) with the network proxy (H.O. DiC 406), which facilitates communications between the terminal (310) and at least one communication device (connected to 210);

identifying the first active communication session to the network proxy (Current Access Network); and

transferring packets to or from the network proxy using the first active communication session to effect communications with the at least one communication device (column 6, lines 24-67).

Watanabe et al does not teach selecting one of the plurality of communication sessions to be a first active communication session.

Datta et al, in the same field of endeavor teach, "A controller provides access to two or more private networks in parallel, through direct or indirect network interfaces. When one attached network fails, the failure is sensed by the controller and traffic is routed through one or more private networks. When all attached networks are

Art Unit: 2616

operating, the controller preferably balances the load between them." (see abstract and [0040]).

For the above reason, it would have been obvious to one skilled in the art at the time of the invention was made to implement the step of selecting one of the plurality of communication sessions to be a first active communication session, such as teaching by **Datta et al**, in **Watanabe et al** for balancing the load in the network.

Regarding claims 9, 19, 28 and 37, **Watanabe et al** further teach wherein the communication sessions are tunneling sessions with the network proxy (see VPN session).

Regarding claims 10, 20, 29 and 38, Watanabe et al further teach wherein the terminal's communications with the plurality of access networks are based on disparate communication technologies ("The mobile device, such as a cell phone, PDA or a lap top computer 310, supports different access network technologies such as WLAN, mobile phone, Bluetooth, ADSL, etc., see column 3, lines 15-20).

7. Claims 5, 15, 25, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (US 7,072,657 B2) in view of Datta et al (2002/0087724 A1).

Regarding claims 5, 15, 25 and 34, Watanabe et al further teach determining a need to switch from the first active communication session (user 310 handoffs); selecting at

Application/Control Number: 10/628,167

Art Unit: 2616

least a second one of the plurality of communication sessions to be a second active communication session (selected Target Access Network, communication session 514); providing indicia indicative of the need to switch from the first active communication session to the second active communication session (notify the proxy network H.O.DiC 406 for authentication of establishing communication session with VPN 514); and transferring packets to or from the network proxy using only the second active communication session to effect the communications with the at least one communication device. (See figure 5, Watanabe et al teach that when user 310 moves to the target access network (510), the second communication sessions (514) is selected as active communication session (the lap top computer 310 handoffs from the current access network 502 to the target access network 510 via gateway 512 and the H.O.DiC 400). User 310 notified the proxy network (H.O.DiC) for authentication of establishing the second communication session (514). Thereafter packets transferring to or from the network proxy using the second active communication sessions can be realized.).

8. Claims 2-3, 6-7, 12-13, 16-17, 19, 22-23, 26-27, 31-32 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Watanabe et al** (US 7,072,657 B2) in view of **Datta et al** (2002/0087724 A1) further in view of **Roberts et al (US 7,072,323** B2).

Regarding claims 2-3, 6, 12-13, 16, 22-23, 26, 31-32 and 35, as explained in the rejection statement of claims (1, 11, 21 and 30) parent claims, **Watanabe et al in view**

Application/Control Number: 10/628,167

Art Unit: 2616

of Datta et al discloses all the claimed limitations recite in parent claims. Watanabe et al in view of Datta et al does not teach transferring the packets to or from the network

proxy using the first and second active communication sessions to effect the

communications with the at least one communication device prior to using only the

second active communication session.

Roberts et al, in the same field of endeavor, teach this limitation. Roberts et al teach, according to figure 6, step 1150, "IAPS and other core network devices continue to send packets to old IAP until they process Gratuitous ARP".

It would have been obvious to one skilled in the art at the time of the invention was made to implement the step of continue to transferring packets to or from the network proxy using first and second active communication sessions until the handoff process is complete. This ensures an uninterrupted packets stream.

Regarding claims 7, 17 and 27, 36, **Roberts et al** further teach sending second indicia instructing the network proxy to stop using the first active communication session (see col. 9, line 35-42).

Allowable Subject Matter

9. Claims 4, 14, 24 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Page 8

Application/Control Number: 10/628,167

Art Unit: 2616

10. Claims 8, 18 would be allowable if rewritten to overcome the rejection(s) under

35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the

limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject

matter: the prior art made of record fails to teach or fairly suggests in combination

wherein the packets are duplicated and sent over both the first and second active

communication sessions.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

June 28, 2007 Brenda Pham

Brench A. Pham

BRENDA PHAM
PRIMARY EXAMINER